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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,874	09/08/2003	Vanita Mani	RD29557-4	2063

6147 7590 10/05/2005

GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER
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STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/657,874

Applicant(s)

MANI ET AL.

Examiner

FRANKIE L. STINSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/8/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oles (U. S. Pat. No. 3,246,493), Takeda (U. S. Pat. No. 4,813,247) or Severns et al. (U.S. Pat. No. 6,691,536) in view of France et al. (U. S. Pat. No. 6,840,069).

Re claims 1 and 21, Oles, Takeda and Severns are all cited disclosing an article cleaning apparatus comprising: an air management mechanism (90 in Oles, 9 in Takeda and 31 in Severns); a cleaning basket assembly; a fluid regeneration device (82, 36, 50 in Oles, 3, 4, ,5 in Takeda and 15 in Severns); a working fluid device (72 in Oles, 31 in Takeda and 8 in Severns) coupled to said fluid regeneration device, said cleaning basket assembly, and said air management mechanism, a clean fluid device coupled to said cleaning basket assembly and said fluid regeneration device; a controller (see fig. 2 in Oles, see col. 5, lines 23-28 in Takeda and 81 in Severns) coupled to said air management mechanism, said cleaning basket assembly, said working fluid device, said regeneration device, and said clean fluid device; wherein said controller is configured to control a cleaning process, including at least a solvent cleaning process, wherein said solvent cleaning process utilizes a solvent based cleaning fluid that differs from the claim only in the recitation of the solvent comprising cyclic siloxane solvent; and a solvent vapor sensor coupled to the controller to determine amounts of solvent vapor that may flow during said solvent cleaning process.

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France is cited disclosing a solvent cleaning process, wherein said solvent cleaning process utilizes a solvent based cleaning fluid comprising a cyclic siloxane solvent (see col.5, lines 48-60); and a solvent/chemical specific vapor sensor coupled to the controller to determine amounts (concentration) of solvent vapor that may flow during said solvent cleaning process (see abstract). It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Oles, Takeda or Severns, to include a vapor/gas sensor as taught by France, for the purpose of preventing prolong processing of the article by processing the article only for the needed time thereby realizing cost and energy effectiveness. It is also old and well known in the art to provide cleaning fluid vapor sensors to detect any leakage of the vapor into the environment, thereby preventing injury to the user and/or the environment. Re claim 2-10, no patentable distinction is deemed to exist in the sensor as claimed and the sensors as taught by France (see col. 8, line 57 thru col. 10, line 52) since France discloses that "many sensors can operate with the present invention" (col. 8, line 57). The sensors are deemed to be functional equivalence of each other (see MPEP 2144.06 SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 11 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by France et al.

Re claim 11, France discloses the solvent vapor determining amount (concentration) and cyclic siloxane as claimed as noted above.

5. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over France et al.

Re claim 12-20, France is cited as applied to the subject matter of claims 2-10 above.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Hahn, Chang, Kaneyasu et al., Chapman, Carnovale, Berndt et al., Lahti et al., Scheper et al., EPO'341, Paulick, Busi, Hubner, Cannon, Eisen, Venkatesetty and Japan'696, note control/sensor means.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls



FRANKIE L. STINSON  
Primary Examiner  
GROUP ART UNIT 1746